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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/566,307

01/27/2006

Dean Kamen

1062/E19

4217

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7590

03/25/2008

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EXAMINER

LAUGHLIN, NATHAN L

ART UNIT

PAPER NUMBER

2123

MAIL DATE

DELIVERY MODE

03/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/566,307	Applicant(s) KAMEN ET AL.	
	Examiner NATHAN LAUGHLIN	Art Unit 2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Claims 1-23 are pending.

Claim 24 has been withdrawn.

Claims 1-23 are rejected below.

Election/Restrictions

1. Applicant's election of Invention I the reply filed on 2-13-08 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Therefore, the election is made final.

Specification

2. The disclosure is objected to because of the following informalities: On page 4, line 3 the term 'them' used, Examiner believes that the term should be 'the'.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites an output sensor that includes a water quality sensor (line 2). However, claim 1, which claim 7 is dependant on, clearly states that the output sensor measures consumption (line 6). It is unclear to the Examiner how a water quality sensor measures consumption. Examiner is unclear on if multiple sensors exist or the output sensor has multiple functions. Examiner requests clarification.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6, 11-17, 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Thompson (U.S. Pat. 5,973,481).

As to claim 1, Thompson teaches a system comprising: a generation device for converting an available resource to a desired utility (abstract), the generation device characterized by a plurality of operating parameters (col. 8

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lines 13-23); b. an input sensor for measuring input to the generation device (col. 8 line 65- col. 9 lines 10); c. an output sensor for measuring consumption of output from the generation device (col. 8 line 65- col. 9 lines 10); d. a controller for concatenating measured input and consumption of output on the basis of the input and output sensors (col. 8 line 65- col. 9 lines 10). e. a remote controller for modifying operation of the generation device: based on the concatenated measured input and consumption of output (fig. 20, col. 17 lines 43-54).

As to claim 2, Thompson teaches a sensor for measuring at least one parameter of the said plurality of operating parameters of the generation device (fig 20).

As to claim 3. Thompson teaches one sensor is a heat transfer monitor (col. 3 lines 7-25).

As to claim 6, Thompson teaches wherein the input sensor is a flowrate monitor (col. 9 lines 12-17).

As to claim 11, Thompson teaches the generation device is an electrical power generator (abstract).

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As to claim 12, Thompson teaches an input sensor includes a fuel consumption rate monitor (col. 9 lines 12-17).

As to claim 13, Thompson teaches an output sensor includes an electrical usage meter monitor (col. 8 line 65 col. 9 line 10).

As to claim 14, Thompson teaches a monitoring system comprising a telemetry module for communicating measured input and output parameters to a remote site (fig.1, 2 elements 48, 50).

As to claim 15, Thompson teaches the telemetry module is a cellular communications system (col. 7 lines 4-10).

As to claim 16, Thompson teaches a telemetry module is a wireless system (col. 7 lines 4-10).

As to claim 17, Thompson teaches a remote actuator for varying operating parameters of the generator based on remotely received instructions (col. 17 lines 43-54).

As to claim 21, Thompson teaches a system comprising: providing a generation device (abstract); coupling an input sensor for measuring input to the generation device (col. 8 line 65- col. 9 lines 10); coupling an output sensor for measuring

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consumption of output from the generation device (col. 8 line 65- col. 9 lines 10); and coupling a controller to the input and output sensor for concatenating measured input and consumption of output on the basis of the input and output sensors (col. 8 line 65- col. 9 lines 10), and providing a remote controller for modifying operation of the generation device based on the concatenated measured input and consumption of output (fig. 20, col. 17 lines 43-54).

As to claim 22, Thompson teaches providing communication between a telemetry module and said controller (fig. 1-2, elements 48, 50); and providing communication between said telemetry module and a monitoring station (fig. 1-2, elements 48, 50).

As to claim 23, Thompson teaches a distributed network of utilities comprising: generators for converting a resource into a useful utility (abstract); input sensors for measuring inputs to respective generators (col. 8 line 65- col. 9 lines 10); output sensor for measuring consumption of output from respective generators, wherein each generator has a local controller that concatenates the measured input and consumption of output from the respective (col. 8 line 65- col. 9 lines 10); a telemetry transmitter for transmitting input and output parameters of a specified generator (fig.3 elements 50, 39); and a remote processor for receiving input and output parameters from a plurality of utility generators (col. 8 lines 40-52, col. 17 lines 43-54).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4, 5, 7, 8, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (U.S. Pat. 5,973,481) in view of Underwood (U.S. PG Pub. 2003/0220717).

Thompson differing from the invention as recited in claims 4, 5, 7, 8, 9, and 10 in that the combined discloser or teaching fails to disclose or teach teaches the following:

As to claim 4, wherein the at least one sensor is a flow impedance monitor.

As to claim 5, generation device is a water purifier.

As to claim 7, wherein the output sensor includes a water quality sensor including at least one of turbidity, conductivity, and temperature sensor.

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As to claim 8, a shut off switch that automatically turns off said generation device when said water quality sensor rises above a pre-programmed water quality value.

As to claim 9, an alarm that alerts a user when said water quality value rises above a pre-programmed water quality value.

As to claim 10, a remotely operable shut off switch.

However Underwood teaches the following:

As to claim 4, Underwood teaches wherein the at least one sensor is a flow impedance monitor [0035]. Underwood teaches the difference in pressure (flow impedance) through components in a water treatment facility.

As to claim 5, Underwood teaches generation device is a water purifier (abstract).

As to claim 7, Underwood teaches wherein the output sensor includes a water quality sensor including at least one of turbidity, conductivity, and temperature sensor [0035].

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As to claim 8, Underwood teaches a shut off switch that automatically turns off said generation device when said water quality sensor rises above a pre-programmed water quality value [0036-0028]. Underwood teaches if the water quality is not high enough that a backwash must be done. This would stop water treatment.

As to claim 9, Underwood teaches an alarm that alerts a user when said water quality value rises above a pre-programmed water quality value [0050]. Underwood teaches that a user can remotely monitor the data using a SCADA control panel and issue a backwash if needed.

As to claim 10, Underwood teaches a remotely operable shut off switch (col. 19 lines 58-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was created to include the teachings of Underwood into the system and methods as disclosed by Thompson. The motivation to combine is using a remote SCADA system a user can control the quality of a utility, such as water, by taking the appropriate action to successfully perform processes based on prompts from the control system [0049-0050].

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8. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (U.S. Pat. 5,973,481) in view of Tucker (U.S. Pat. 6,568,416).

Thompson differing from the invention as recited in claims 18-20 in that the combined discloser or teaching fails to disclose or teach teaches the following:

As to claim 18 a self-locating device having an output indicative of the location of the monitoring system.

As to claim 19, the self-locating device is a global positioning system.

As to claim 20, monitored characteristics of input and output depend upon the location of the monitoring system.

However Tucker teaches the following:

As to claim 18, Tucker teaches a self-locating device having an output indicative of the location of the monitoring system (col. 12 lines 47-66).

As to claim 19, Tucker teaches the self-locating device is a global positioning system (col. 12 lines 47-66).

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As to claim 20, Tucker teaches monitored characteristics of input and output depend upon the location of the monitoring system (col. 12 lines 47-66).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a GPS component as done in Tucker into the monitoring system of Thompson. The motivation to combine is using GPS systems can increase precision and reduce errors (col. 1 line 63- col. 2 line 10).

Response to Arguments

9. Applicant's arguments with respect to claims 1-23 are have been considered but are moot in view of the new ground(s) of rejection.

Inquiry

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATHAN LAUGHLIN whose telephone number is (571)270-1042. The examiner can normally be reached on M - F, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nate Laughlin

3-14-08

/Paul L Rodriguez/

Supervisory Patent Examiner, Art Unit 2123